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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	09/743,133	Group Art Unit	2878
Filing Date	23 February 2001	Examiner Name	Shun K. LEE
First Named Inventor	Mattias BECK	Attorney Docket No.	GLN-005US
Title: DEVICE FOR DETECTING A CHEMICAL ELEMENT BY PHOTOEXCITATION			

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. § 1.97(b) or 1.97(c)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


December 18, 2003

37 C.F.R. § 1.97(b)

1. ☐ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth under 37 C.F.R. § 1.491 in an international application; or before the mailing of a first Office Action on the merits, whichever event occurs last.

37 C.F.R. § 1.97(c)

2. ☒ The Information Disclosure Statement submitted herewith is being filed after three month of the filing of a national application, or the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either (a) a Final Action under 37 C.F.R. § 1.113 or (b) a Notice of Allowance under 36 C.F.R. § 1.311, whichever occurs first.

<b>CERTIFICATE OF FACSIMILE TRANSMISSION</b>		
I hereby certify that this correspondence is being transmitted by facsimile to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, to the facsimile number and on the date indicated below.		
Facsimile No: (703) 872-9318	No. of pages in fax: 105: 4 Total:	Date Transmitted: December 18, 2003
 Deborah G. VandenHoff		Van Tassel & Associates P.O. Box 2928 Bellaire, TX 77402-2928 Phone: (713) 839-1749 Fax: (713) 839-1790

**Statement under 37 C.F.R. § 1.97(e)**

- ☐ Each item of information contained in the Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

**Payment of Fee, In lieu of Statement under 37 C.F.R. § 1.97(e)**

- ☒ In payment of the fee set forth in 37 C.F.R. § 1.17(p) for submission of an Information Disclosure Statement under 37 C.F.R. § 1.97(c), the Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. **11-0227**.

Respectfully submitted:

By: \_\_\_\_\_

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	09/743,133
				Filing Date	23 February 2001
				First Named Inventor	Mattias BECK
				Group Art Unit	2878
				Examiner Name	Shun K. LEE
Sheet	1	of	2	Attorney Docket Number	GLN-005US

U.S. PATENT DOCUMENTS							
Examiner Initials	Cite No.	U.S. Patent Number	Name of Patentee or Applicant of Cited Document	Date	Class	Subclass	Filing Date
		5,457,709					
		5,509,025					
		5,570,386					
		4,938,593					
		4,243,327					
		5,513,006					

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FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Publication Date	Class	Subclass	Translation
		Country	Number					
		WO	93/22649					
		EP	0 685 728					

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issued number(s), publisher, city and/or country where published	Translation
		Thony, A. et al. "New Developments in CO <sub>2</sub> Laser Photoacoustic Monitoring of Trace Gases" <u>Infrared Phys Technol</u> 36:2:585-615; 1995	
		"Laser Action by Turning the Oscillator Length" <u>Nature</u> 387:777-782; 1997	
		"High Power Infrared (8 micrometer wavelength) Superlattice Lasers" <u>Science</u> 276: 773-776; 1997	
		"Distributed Feedback Quantum Cascade Lasers" <u>Appl Phys Lett</u> 70:20:2670-2672; 1997	
		"Complex Coupled Quantum Cascade Distributed Feedback Laser" <u>Photonics Tech Lett</u> 9:8:1090-1092; 1997	
		Lin, C-H et al. "Low Threshold Quasi-CW Type II Quantum Well Lasers at Wavelength Beyond 4 μm" <u>Appl Phys Lett</u> 71:22:3281-3283; 1997	
		Yang, R.Q. et al. "High Power Mid-Infrared Interband Cascade Lasers Based on Type II Quantum Wells" <u>Appl Phys Lett</u> 71:17:2409-2411; 1997	

Examiner Signature		Date Considered	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant			



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Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issued number(s), publisher, city and/or country where published	Translation
		Rybaltowski, A. et al. "High Power InAsSb/InPAsSb/InAs Mid-Infrared Lasers" <u>Appl Phys Lett</u> 71:17:2430-2432; 1997	
		Vansteenkiste, T.H. et al. "Photoacoustic Measurement of Carbon Monoxide Using a Semiconductor Diode Laser" <u>Applied Spectroscopy</u> 35:2:194-196; 1981	
		Chey, J.W. et al. "Resonant Photoacoustic Detection of Methane in Nitrogen Using a Room Temperature Infrared Light Emitting Diode" <u>Applied Optics</u> 26:6: 3192-3193; August 15, 1987	
		Olsson, B. et al. "Optoacoustic Lead-Salt Diode Laser Detection of Trace Species in a Flow System" <u>Applied Spectroscopy</u> 49:8:1103-1106; August 1, 1995	
		Stephan, K. et al. "Die photoakustische Infrarot-Laser-Spektroskopie zur Konzentrationsmessung in Gasen" <u>Chem Ing Tech</u> 58:6:485-487; 1986	

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